

LEADER 13 December 2017

# The world urgently needs critical thinking, not gut feeling

Our brain's autopilot can serve us well, but effortless thinking is behind many of the world's biggest problems. Science training can help turn the tide



Kristian Buus/In Pictures via Getty

IN A classic episode of *The Simpsons*, Marge and Homer's night out at a class reunion ends in humiliation when one of Homer's guilty secrets is exposed: he never graduated from high school. To get his diploma, he must pass a science test. As he sits down to retake the exam, he holds one of his trademark dialogues with his brain. "All right, brain. You don't like me and I don't like you. But let's just do

this and I can get back to killing you with beer.”

Many a true word is spoken in jest. Homer Simpson’s Everyman character really is an Everyman. For most people, engaging in the kind of effortful thinking that is required to pass a science test feels too much like hard work. It is so much easier to kick back and let the brain’s autopilot take over.



## Effortless thinking

**Sloppy thinking is at the root of many modern ills. We delve into nine key ideas that come naturally to us to find out why they are often so misguided**

And no wonder. Even when lubricated with beer, the autopilot is a pretty impressive piece of kit. Evolution has endowed the human brain with all kinds of mental shortcuts that make life manageable. If we had to think about every action or weigh up every decision, we would be paralysed. As a result, certain ideas and modes of thinking come naturally to us (see “Effortless thinking”).

But at huge cost. Our mental shortcuts work fine at the level of individuals and small-scale societies, but in an increasingly interconnected and globalised world, they are a danger to society. Effortless thinking is at the root of many of the modern world’s most serious problems: xenophobia, terrorism, hatred, inequality, defence of injustice, religious fanaticism and our shocking susceptibility to fake news and conspiracy theories. All are facilitated by people disengaging their critical faculties and going with their gut – and being encouraged to do so by populist politicians channelling anger at the liberal establishment.

**“In an increasingly interconnected world, our mental shortcuts are a danger to society”**

This is a potent political message because it both elevates common sense and exploits our instinctive tribalism by suggesting that the world is divided into two mutually antagonistic tribes – the

no-nonsense masses and the pointy headed elite.

This couldn't be further from the truth. Everybody is capable of gut thinking, but also of the careful deliberation that is required to solve problems and override our basest instincts. Both thinking styles are needed to make the world go round. Unfortunately, the latter requires training that is unavailable or unappealing to many people.

Put simply, effortless thinking is born, critical thinking is made. Research tells us that a scientific education is especially good at developing critical thought. But too many people take the Homeric view of science: boring, hard, irrelevant and dispensable.

It would be naive to suggest that science education is the answer to all our problems: Homer passed the exam, but then reverted to type. But it isn't naive to suggest that it can help make the world a better place. One of the bright spots of a miserable 2017 was the start of a movement called the March For Science. Those who believe in the transformative power of science and rationality need to keep on marching, or cede yet more power to people who don't much like their own brains – or other people's.

*This article appeared in print under the headline "Mission critical thinking"*

